



Tuolumne County Emergency Medical Services Agency
EMS System Policies and Procedures

**Policy: Advanced Life Support Equipment and
Medication Inventory**

#437.00

Medical Director:		Creation Date:	10-30-97
EMS Coordinator:		Revision Date:	02-19-14
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I. AUTHORITY

Division 2.5, California Health and Safety Code, Sections 1797.220, 1798 and; Title 22, California Code of Regulations, Chapter 4, Section 100168 (b)(3).

II. PURPOSE

The purpose of this policy is to establish the minimum inventory requirements for equipment and medication to be carried on all advanced life support ambulances and other authorized ALS vehicles.

III. POLICY

- A. All ALS units at the beginning of a shift shall be completely stocked with the following equipment and medications in the amounts specified. The ALS provider is responsible for establishing a re-stocking process for ensuring the availability of replacement equipment and medications and that their personnel replace all equipment and medications at the conclusion of each incident. If an ALS Unit is requested by an authorized dispatch agency to respond to an emergency call before that unit has completely re-stocked, that unit may respond as long as it has sufficient drugs and equipment on board to provide proper patient care as defined by the Tuolumne County EMS Agency ALS Treatment Protocols.
- B. In addition to the equipment and medications specified in this policy, all ALS units shall carry the equipment and medications required by the California Highway Patrol as specified in Title 13, California Code of Regulations, Chapter 5, sections 1103 and 1103.2.

IV. COMMUNICATIONS EQUIPMENT

- A. All ALS units shall have radios which are capable of receiving and transmitting, using assigned frequencies for communications with the Tuolumne County Sheriff's Office Dispatch Center, the California Department of Forestry/Tuolumne County Fire Department Dispatch Center, other Tuolumne County ambulances and first response units, neighboring ambulance provider units and area Air Ambulances.

- B. All ALS units shall have medical-network (Med-Net) radios which are capable of receiving and transmitting communications, using assigned frequencies, with the Sonora Community Hospital, Tuolumne General Hospital, the hospitals in Stanislaus, Calaveras and Mariposa counties and the Tuolumne County Disaster Control Facility. Additionally, Med-Net radios the capability of receiving and transmitting on required UHF med-net channels and appropriate private line tones. Med-Net radios shall be accessible in the patient compartment.
- C. All ALS units shall be equipped with at least one (1) portable radio capable of transmitting and receiving to and from the ALS unit, while on the scene of a medical emergency.

V. MEDICATION AND IV SOLUTION MAINTENANCE

- A. The expiration date of all medications and IV Solutions shall be checked on the first day of each month. All medications with expiration dates of less than 30 days shall be exchanged for medications or solutions with an expiration date of greater than 90 days.
- B. The location of medication storage on the ALS unit shall be determined by the ALS Service Provider, except for controlled substances which shall be stored in accordance with the Policy 439.00 Controlled Substances.
- C. ALS Ambulance Service Providers shall take provisions to maintain medications and IV solutions within the temperature range recommended by the manufacturer, with the exception of two (2) IV bags of 1000 ml normal saline which shall be kept within a normal physiological temperature range.

VI. MEDICATION INVENTORY

- A. Activated Charcoal..... 100 gm.
- B. Adenosine 48 mg of a 6 mg/2 ml concentration.
- C. Albuterol 15 ml of a 0.5 % solution for use in a HHN
or 1 MDI of 0.5% solution
- D. Amiodarone..... 1,200 mg of a 50mg/ml solution.
- E. Aspirin..... 1 bottle of 81 mg chewable.
- F. Atropine Sulfate 6 mg of a 1 mg/10 ml concentration.
- G. Calcium Chloride 2 gm.
- H. Dextrose 75 gm of a 25 mg/50 ml concentration.
- I. Diphenhydramine Inj. 100 mg of a 50 mg/1 ml concentration.
- J. Epinephrine 8 mg of 1:10,000.
- K. Epinephrine 4 mg of 1:1000.
- L. Epinephrine 30 mg of a 1 mg/1 ml (1:1000) concentration.
- M. Furosemide Injectable 200 mg of a 10 mg/1 ml concentration.
- N. Glucagon 1 mg (1 unit).
- O. Ipratropium Bromide..... 5 unit dose vials, 500 mcg in 2.5 ml.
- P. Instant Glucose..... 2 tubes.
- Q. Lidocaine..... 400 mg of a 20 mg/ml concentration.

- R. Lidocaine.....2 gm for dilution or
1 pre-mixed infusion solution of 4 mg/1 ml.
- S. Magnesium Sulfate..... 4 gm in 500 mg/ml solution.
- T. Naloxone 20 mg of a 1 mg/ml concentration.
- U. Nitroglycerine 2 spray vials capable of providing a metered dose
.....of 0.4 mg/spray or 2 vials of 0.4 mg tablets.
- V. Nitroglycerine Paste 2%.....10 – 1 Gram foil pack or 1 – 30 Gram tube
- W. Normal Saline 20 ml for dilution.
- X. Oxytocin.....20 units.
- Y. Sodium Bicarbonate.....100 ml of a 50 mEq/50 ml concentration.
- Z. Verapamil..... 15 mg.
- AA. Ondansetron.....24 mg in any
combination of Oral Disintegrating Tablets
(ODT) or solution in single-dose ampules

VII. CONTROLLED SUBSTANCES

- A. The following inventory of controlled substances is a maximum amount that shall be carried on ALS units rather than a minimum requirement as the rest of the equipment and medication specified by this policy.
 - 1. Morphine Sulfate 10 mg x 10.
 - 2. Midazolam 5 mg x 6.
 - 3. Fentanyl Citrate.....100 mcg x 6.

VIII. IV SOLUTIONS AND IV/MEDICATION SUPPLIES

- A. Pre-packaged alcohol swabs 10 each.
- B. Arm boards (child and adult sizes) 1 each.
- C. Adhesive bandages (i.e. Band-Aids®) Various sizes and amounts.
- D. Medication added labels for IV bags 4 each.
- E. Intra osseous needles..... 13, 15, and 18 gauge x 2.
- F. IV Catheter Needles.....Sizes 14 through 22 gauge 5 each.
- G. IV Catheter Needles.....Size 10 or 12 gauge x 2
- H. Needles for Injections Sizes 18 or 19, 22 or 23,
..... 24 or 25 gauge x 5 each.
- I. Normal Saline250 ml x 2, 500 ml x 2, 1000 ml x 8.
- J. Blood Y IV Tubingsets x 4.
- K. Macro-Drip Set (10-20 gtts/ml) x 4.
- L. Micro-Drip Set.....(60 gtts/ml) x 4.
- M. Extension tubingx 4.
- N. Syringes..... 1 ml, 10ml and 20 ml x 4.
- O. Tape..... x 4 rolls, one roll must be hypo-allergenic.
- P. Constricting bandsx 3.
- Q. Gloves (exam type) 1 box size large.
- R. Sharps Container(s) as necessary to assure proper and safe disposal of all sharps.

IX. CARDIAC EQUIPMENT

- A. EKG Monitor with paper print out.
- B. Defibrillator with variable power control and a range capability of 25-360 watt seconds.
- C. Adult and Pediatric defibrillation paddles.
- D. All monitor/defibrillator units shall have the capability to perform synchronized cardioversion.
- E. All monitor/defibrillator units shall have batteries which may be removed and replaced should the batteries lose their charge.
- F. Electrode pads.
- G. Electrode paste or defibrillator pads.
- H. Two sets of monitor cables (one with monitor; one as back-up).
- I. Extra set of charged batteries for defibrillator and monitor.

X. RESPIRATORY

- A. Oral pharyngeal airways (sizes 00 through 6)x 2.
- B. Nasal pharyngeal airways (sizes pediatric through adult)x 2.
- C. Adult, pediatric 100% O₂ bag-valve device with clear maskx 1.
- D. Laryngoscope with two (2) sets of batteriesx 1.
- E. Laryngoscope blades, one (1) set of 4 curved, sizes 1 to 4.....x 1.
- F. Laryngoscope blades, one (1) set of 4 straight, sizes 1 to 4.....x 1.
- G. Spare light bulbs - one large and one small for laryngoscope blades.
- H. Endotracheal tubes 2.0mm through 4.5mm (uncuffed) 1 ea
.....5.0mm through 6.5mm (uncuffed or cuffed)1 ea
..... 7.0mm through 9.5mm (cuffed)1 ea
- I. Endotracheal tube stylet to fit all size tubes.
- J. King Airway (or equivalent) sizes 3, 4 and 5.....1 ea.
- K. Two (2) Wall mounted flow meters, capable of measuring oxygen flow from 0-15 L/min.
- L. Magill Forceps both child and adult sizes..... x 1 each.
- M. Nasogastric tubes adult and pediatric sizes..... x 1 each.
- N. Water soluble lubrication jelly 1 tube or equivalent.
- O. Oxygen mask with reservoirs adult and pediatric sizes x 4 each.
- P. Oxygen tubing adapters (Christmas tree style).....x 2.
- Q. Suction catheters sizes 6-14 french..... x 1 each.
- R. Suction handle-tip catheterx 2.
- S. Non-Collapsible suction tubing x 2 tubes or a 4 foot roll.
- T. Nebulizers (hand held and mask style) x 2 each.
- U. Suction devices, one stationary and one portable. Both capable of developing 12 mm of mercury negative pressure and moving 30 L/min.
- V. Bite sticks.....x 2.
- W. In-Line Continuous Positive Airway Pressure Valves with fixed pressure delivery of 5 and 7.5 mm Hg.x 1.
- X. Quicktrach Kits (Adult and Pediatric).....1 ea.

XI. TRAUMA AND ORTHOPEDIC EQUIPMENT

- A. Kendrick extrication device or comparable equipmentx 1.
- B. Scoop stretcher.....x 1.
- C. Long backboards.....x 2.
- D. Straps capable of restraining the chest, waist and legs of a patient to a long back board.
- E. Pediatric immobilization device, specifically designed for pediatric spinal immobilizationx 1.
- F. Burn pack which contains clean sheets, sterile gloves, towels and a gown.....x 1.
- G. Rigid cervical collars sizes for infant or pediatric no-neck, pediatric, no-neck, short, regular and tall x 1 each.
- H. Chemical cold packsx12.
- I. Traction splints, adult and pediatric..... x 1 each.
- J. Rigid extremity splints, both leg and arm for pediatric and adult x 2 each.
- K. Sterile Vaseline gauze.....x 6.

XII. OBSTETRIC EQUIPMENT

- A. Any commercial or pre-packaged pack which meets the requirements Title 13, California Code of Regulations, Chapter 5, section 1103.2(a)(17)x 1.
- B. Any commercial, blanket designed for conserving newborn warmthx 2.
- C. Sterile scissors or scalpel (may be part of the O.B. kit.).....X 1.

XIII. MISCELLANEOUS EQUIPMENT

- A. Blood pressure cuffs x 2 adult and 1 pediatric and 1 extra long (i.e. thigh).
- B. Catheter Tip Syringesx 2.
- C. Stethoscopex 2.
- D. Patient Care Report Forms and triage tagsx10.
- E. Normal saline for irrigation 1000 mlx 4.
- F. Glucometer capable of determining blood glucose level from either venous or capillary bloodx 1.
- G. Pulse oximeter.....x 1.
- H. Nasal atomization adaptor for syringe with Luer lock connection.....x 2
- I. Pediatric Drug Dose Chart or Tape (i.e. Broslow Tape), capable of generating an estimated weight in kg based on patient length.
- J. Agency/OES Region IV approved Multi-Casualty Incident (MCI) Triage Pack x 1.